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| APPLICATION NO.                 | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|---------------------------------|-------------|----------------------|-----------------------|------------------|
| 10/720,724                      | 11/24/2003  | Mitsuro Atobe        | 9319K-000606          | 2761             |
| 27572                           | 7590        | 09/27/2006           | EXAMINER              |                  |
| HARNES, DICKEY & PIERCE, P.L.C. |             |                      | DHINGRA, RAKESH KUMAR |                  |
| P.O. BOX 828                    |             |                      | ART UNIT              |                  |
| BLOOMFIELD HILLS, MI 48303      |             |                      | PAPER NUMBER          |                  |

1763

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

5

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 10/720,724             |  | ATOBE ET AL.        |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Rakesh K. Dhingra      |  | 1763                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1763

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/21/06 has been entered.

### ***Response to Arguments***

Applicant's arguments with respect to claims 3, 5 and 13 have been considered but are moot in view of the new ground(s) of rejection as explained hereunder.

Applicant has amended independent claim 5, 13 and deleted claim 3.

New reference has been found (US PGPUB 2003/0150384, Baude et al) and (US patent No. 6,171,736, Hirayanagi et al) that when combined read on limitations of claim 5 and 13. Accordingly claims 5 and 13 have been rejected under 35 USC 103 (a) as explained below.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly

Art Unit: 1763

owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 5, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baude et al (US PGPub No. 2003/0150384) in view of Hirayanagi et al (US Patent No. 6,171,736).**

Regarding Claim 5: Baude et al teach an apparatus (Figures 5-7) that includes a vacuum chamber 50 with a deposition unit (evaporation source) 54, a mask 10 J/K and deposition substrate 52 and controls deposition in a predetermined manner.

Baude et al further teach that an electrostatic charge may be applied to the mask 10K by electrostatic techniques (electrostatic chucking mechanism) to address the sag problem when working with large size masks (paragraphs 0033-0040).

Baude et al do not teach mask including silicon and also do not expressly teach mask having electrodes for generating electrostatic attraction, and the connected wiring (unit for supplying charge to the mask pattern).

Hirayanagi et al teach an apparatus (Figures 1, 5) that includes silicon mask assembly having mask patterns 11a, 11b and provided with electrodes 83a-83h that are secured to the mask retention member 82 by using electrostatic charge (column 4, line 60 to column 5, line 36). Hirayanagi et al does not expressly teach associated wiring (including unit) for providing electric power to electrodes on the mask but the same would be obviously required for generating electrostatic charge.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide electrodes with connected wiring for generating electrostatic attraction as taught by Hirayanagi et al in the

Art Unit: 1763

apparatus of Baude et al et al when using non flexible masks (like masks made from silicon) for holding deposition substrate without sag.

Regarding Claim 13: Baude et al in view of Hirayanagi et al teach all limitations of the claim (as explained above) including that apparatus of the invention can be used for manufacture of display panels by depositing organic compound (paragraphs 0003, 0006, 0027, 0029).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rakesh K. Dhingra whose telephone number is (571)-272-5959. The examiner can normally be reached on 8:30 -6:00 (Monday - Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571)-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rakesh Dhingra



Parviz Hassanzadeh  
Supervisory Patent Examiner  
Art Unit 1763